

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
XTO Energy Well Blowout - E18512 - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #1
Initial
XTO Energy Well Blowout - E18512

Powhatan Point, OH
Latitude: 39.8690385 Longitude: -80.8509623

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From: Eric Pohl, On-Scene Coordinator; James Justice, On-Scene Coordinator; Andrew Kocher, On-Scene Coordinator; and Sean Kane, On-Scene Coordinator

Date: 2/17/2018

Reporting Period: 02/15/2018 - 02/17/2018

1. Introduction

1.1 Background

Site Number:	Z5RZ(OPA), C5KY(CERC)	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	2/15/2018	Start Date:	2/15/2018
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	Ohio EPA, ODNR
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

OPA/CERCLA Emergency Response - Well Pad Fire

1.1.2 Site Description

1.1.2.1 Location

The XTO Energy, Inc. Schnegg B Pad is located at 52168 Cats Run Road, Powhatan Point, Belmont County, Ohio. The well pad is located in a rural area with approximately 94 residents in 36 homes located within 1 radius mile. Discharge from the well pad is directly impacting Cats Run tributary.

1.1.2.2 Description of Threat

During operations at a natural gas production well, a blowout occurred resulting in the uncontrolled venting of gas. Natural gas, produced water, and brine has discharged along with unknown condensate components estimated to be at 100 million cubic feet per day.

Public safety agencies currently have established a 1-mile residential evacuation around the well site; in addition, Unified Command has established a 1/2-mile exclusion zone for responding agencies around the well site.

Cats Run Tributary flows to Captina Creek to the Ohio River. There are also potentially protected species located near and/or downstream of the release site.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The XTO Energy Schnegg B natural gas well experienced a blowout on the morning of February 15, 2018. An unknown quantity of brine and produced water, estimated to be more than 5,000 gallons was initially discharged to Navigable Waters with a continuing release of unknown quantity still occurring. In addition, Unified Command is attempting to evaluate whether natural gas condensate was discharged. Oil assessment and impact evaluate is hindered by weather conditions and safety considerations precluding approach of personnel in proximity of the well pad. Fires continue to flash from the well head. Uncontained run-off was exiting the site and entering an unnamed tributary of Cats Run and produced water was spilling onto the well pad. Unified Command is also attempting to determine whether a release of fracking and well chemicals is occurring.

To protect public safety, air monitoring was initiated at the boundary of the 1-mile evacuation zone; and additional air monitoring was implemented at the boundary of the 1/2-mile exclusion zone. Well pad air monitoring was also operating on the well pad. The well pad monitoring instruments had been installed prior to the beginning of the incident.

Unified Command is evaluating the impact of the release and discharge to Navigable Waterways, and any impact to sensitive ecological receptors. A Natural Resources consultation was conducted with US Fish & Wildlife Service on February 17, 2018.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On February 15, 2018 at approximately 0900, a fire and subsequent fires occurred at the XTO Energy Schnegg B Well Pad located at 52168 Cats Run Road, Powhatan Point, Belmont County, Ohio. The fire was a result of a loss of control of the well and blowout. XTO Energy made a preliminary estimate of 100 Million cubic feet per day of natural gas per day escaping the damaged well head. The well head flashes and catches fire on an intermittent basis. A 1-mile voluntary residential evacuation is in place for the area surrounding the Site, impacting approximately 94 residences and 36 homes.

2.1.2 Response Actions to Date

February 15, 2018

EPA received a request to provide air monitoring and sampling support to OEPA. Upon arrival, EPA & OEPA deployed an initial array of AreaRAE air monitors at the 1-mile evacuation boundary and monitored for VOCs and LEL. EPA & OEPA deployed a total of 5 AreaRAEs, supplemented by 1 additional handheld air monitoring instrument. Deployed air monitoring is operating continuously.

Unified Command established and are composed of on-site representatives from EPA, OEPA, ODNR, OSHP, Belmont County EMA, Powhatan Point Fire Department, and XTO Energy Inc.

February 16, 2018

EPA fully integrated into Unified Command. EPA participated in all Command, Planning, and Environmental Operations meetings.

EPA assisted OEPA in monitoring water quality as well as provided oversight to XTO Energy's contractors, Hull and Associates and TekSolv. Inspection of the creek and river downstream of the incident did not visually identify shoreline or wildlife impact.

EPA requested a plume model through IMAAC, and shared the product to Unified Command.

EPA received preliminary draft discharge/release well pad containment plan from XTO Energy.

EPA performed a consultation with the natural resources trustee, U.S. Fish and Wildlife Service. USFWS identified the possibility of federally endangered Northern long-eared bats, interjurisdictional fish, and Eastern hellbender salamanders in the area and potential ecological receptors. USFWS provided recommended certain water monitoring parameters.

EPA continued air monitoring support. At approximately 19:00, XTO Energy Inc. via their contractor TekSolv, assumed responsibility for deploying and operating air monitoring. TekSolv replaced all of the EPA AreaRAEs with contractor equipment.

Through information provided by XTO Energy, EPA evaluated potential CERCLA hazardous substances present on the well pad or in the well bore in the time frame leading into the blowout. In addition to the brine, which will be sampled to determine its hazardous characteristics, other identified materials included (volumes approximated, parenthetical substances are hazardous substances presently releasing or released):

- 225,500 gallons of HC-15 (hydrochloric acid)
- 454 gallons of CI-3 (ethylene glycol, dimethylformamide, 2-butoxyethanol, 4-nonylphenol, 1-octanol, isopropanol, triethyl phosphate)
- 19,739 gallons FR-16 (hydrotreated light petroleum distillates, ethylene glycol)
- 3,499 gallons of SI-6 (ammonium chloride, monoethanolamine hydrochloride, methanol, proprietary components)
- 1,976 gallons of BioClear 2000 (2,2-Dibromo-3-nitrilopropionamide)

- 8,413 gallons of GA-7F (hydrotreated light petroleum distillates, guar gum, ethoxylated alcohols, organophylic clay)
- 635 gallons of BR-11 (ammonium persulfate, cured resin, silica)

In addition, chemical constituents cited in SDSs as "trade secrets" could exhibit properties meeting the definition of a CERCLA hazardous substance.

February 17, 2018

EPA continued to provide air and water quality monitoring support along with providing technical support through the Unified Command structure to develop the following plans: Air Monitoring Plan, Water Quality Monitoring Plan, Drilling Fluid Plan, Hazmat Assessment Plan, Biocide Plan, Containment Plan, Community Action Plan, and a Waste Management Plan.

The XTO Energy Inc. technical contractors conducted an initial assessment in the immediate area of the well pad to determine the viability of well access. However, air quality monitoring on the pad had exceeded the established lower explosive level (LEL) resulting in operations being temporarily suspended.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

XTO Energy is the suspected Responsible Party. Enforcement activities are being identified.

2.2 Planning Section

2.2.1 Anticipated Activities

Continue to support worker and public safety through continued evaluation of air monitoring data and providing technical expertise to Unified Command as necessary.

Determine the extent and impact of oil, hazardous substances, pollutants and/or contaminants that have been discharged or released.

Continue to evaluate potential impact of oil to navigable waters, and hazardous substances to the environment.

2.2.1.1 Planned Response Activities

EPA will continue to provide air and water quality monitoring support along with providing technical support through the Unified Command structure to evaluate the following plans: Air Monitoring Plan, Water Quality Monitoring Plan, Drilling Fluid Plan, Hazmat Assessment Plan, Biocide Plan, Containment Plan, Community Action Plan, and a Waste Management Plan.

2.2.1.2 Next Steps

Finalize comprehensive environmental monitoring and sampling plans through Unified Command

Continue to assess and evaluate potential migration pathways both on and off-site from the well pad

2.2.2 Issues

Weather and safety considerations are affecting operations.

2.3 Logistics Section

XTO Energy through Unified Command will continue to manage Resources and Logistics.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Unified Command has established a site safety officer.

2.5.2 Liaison Officer

EPA, as a component of Unified Command, is supporting interactions with local and state stakeholders and elected officials.

On February 16, 2018, Ohio State Senator Frank Hoagland visited the Incident Command Post.

2.5.3 Information Officer

Unified Command is providing information to the public on a regular basis. Local response agencies and XTO Energy have provided media availabilities.

There has been extensive local media coverage of the event.

National Media stories:

<https://www.apnews.com/1e490beec6534a7e8c9896ba4c2b1ff/Winds-hindering-efforts-to-shut-down-exploded-Ohio-gas-well>

<https://www.apnews.com/ca58533227ac4806887f58a276c00ace/Gas-well-explosion,-residents-living-nearby-ordered-to-leave>

3. Participating Entities

3.1 Unified Command

U.S. Environmental Protection Agency
Ohio Environmental Protection Agency

3.2 Cooperating Agencies

Belmont County Emergency Management Agency
ODNR Division of Wildlife
U.S. Fish and Wildlife Service
Ohio State Troopers
Belmont County Sheriff's Office

4. Personnel On Site

Personnel on Site

Unified command continues to mobilize essential personnel for response efforts

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

<https://response.epa.gov/XTOPowhatenPoint>

6.2 Reporting Schedule

Pollution Reports will be released daily.

7. Situational Reference Materials

No information available at this time.